identifying compounds that modulate the function of a C-RET receptor tyrosine kinase.[1] In response to the election of species requirement, Applicants elect C-RET.[2]

Claim 1 has been amended to incorporate the subject matter of claims 2-5, which have been canceled. Claim 11 has been amended to incorporate the subject matter of claims 12-15, which have been canceled.

Claims 2-5, 9, 12-15 and 19 have been canceled without prejudice to or disclaimer of the subject matter contained therein; Applicants reserve the right to file one or more divisional or continuation applications to the subject matter of said claims.

As a result of the above mentioned amendments to the claims, claims 1, 6-8, 10, 11, 16-18 and 23-26 are pending.[3]

Applicants respectfully traverse the requirement for restriction based on the amended claims. The amended claims now recite that the claimed method must be practiced with a chimera comprising an extracellular region and an intracellular region, wherein the extracellular region is an extracellular region of RET or the intracellular region is an orphan intracellular region of C-RET tyrosine kinase. As noted above, claims of the elected group are drawn to identifying compounds that modulate the function of the C-RET receptor tyrosine kinase. A search with respect to the amended claims and elected group would require a common search for RET. Where there is not a serious burden on the Examiner, restriction is not proper (*see* MPEP 803). Specifically, in the present case, there would not be a serious burden on the Examiner if restriction is not required between the groups as represented by the claims, as amended. On this basis, reconsideration and withdrawal of the requirement are respectfully requested.

The Office Action further required that Applicants elect a patentably distinct species. The amended claims as well as elected species are drawn to the Office Action's C-RET species. Applicant's respectfully submit that the Office Action's requirement for an election of species is moot in view of the amended claims and Applicant's response to the requirement for restriction.

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[1] Applicants note that the Examiner's grouping of the claims erroneously included Claim 22 in both groups II and III. Applicants believe that Claim 22 belongs only in Group III.

[2] Applicants respectfully note that in view of the election of group III drawn to the C-RET species for prosecution, an election of species is not necessary.

[3] The pending claims are attached as Appendix A.

CONCLUSION

Applicants believe that the claims are now in condition for allowance and a notice to that effect is respectfully requested. In view of the above, Applicants respectfully submit that the claims are in condition of allowance. Applicants respectfully request that the Application be allowed and passed to issue. No fee is believed due in connection with this response. If this is incorrect, please charge Lyon & Lyon Deposit Account No. 12-2475 for the appropriate amount. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect at (858) 552-8400.

Respectfully submitted,

Dated: 7/22/99

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APPENDIX A

1. (AMENDED) A method of evaluating a function of a receptor protein tyrosine kinase comprising the following steps:

(a) transfecting a nucleic acid vector into cells, wherein said vector encodes a chimera comprising an extracellular region and an intracellular region, wherein said intracellular region is from said receptor protein tyrosine kinase,

wherein either said extracellular region is an extracellular region from RET or said intracellular region is an intracellular region of orphan C-RET receptor tyrosine kinase;

(b) contacting said cells with an antibody, wherein said antibody has specific binding affinity to said extracellular region; and

(c) monitoring an effect on said cells.

6. The method of claim 1, wherein said cells and said extracellular region are from different species.

7. The method of claim 6, wherein said cells are mammalian.

8. The method of claim 6, wherein said extracellular region is isolated from a chicken.

10. The method of claim 1, wherein said effect is a change or absence of a change in cell phenotype.

11. (AMENDED) A method of identifying compounds that modulate the function of a receptor protein tyrosine kinase in cells, wherein said method comprises the following steps:

(a) transfecting a nucleic acid vector into said cells, wherein said vector encodes a chimera comprising an extracellular region and an intracellular region, wherein said intracellular region is from said receptor tyrosine kinase,

wherein either said extracellular region is an extracellular region from RET or said intracellular region is an intracellular region of orphan C-RET receptor tyrosine kinase;

(b) contacting said cells with one or more compounds;

(c) contacting said cells with an antibody, wherein said antibody has specific binding affinity to said extracellular region; and

(d) monitoring an effect on said cells.

16. The method of claim 11, wherein said cells and said extracellular region are from different species.

17. The method of claim 16, wherein said cells are mammalian.

18. The method of claim 16, wherein said extracellular region is isolated from a chicken.

20. The method of claim 11, wherein said effect is a change or an absence of a change in cell phenotype.

21. The method of claim 11, wherein said effect is a change or an absence of a change in the catalytic activity of said intracellular region.

22. The method of claim 11, wherein said effect is a change or an absence of a change in an interaction between said intracellular region and a natural binding partner.

23. A method of identifying compounds that modulate the function of C-RET receptor protein tyrosine kinase comprising the following steps:

(a) expressing said C-RET in cells;

(b) contacting said cells with one or more compounds; and

(c) monitoring effect on said cells

24. The method of claim 23, wherein said effect is a change or an absence of a change in cell phenotype.

25. The method of claim 23, wherein said effect is a change or an absence of a change in catalytic activity of said C-RET receptor.

26. The method of claim 23, wherein said effect is a change or an absence of a change in the interaction between said C-RET receptor and a natural binding partner.